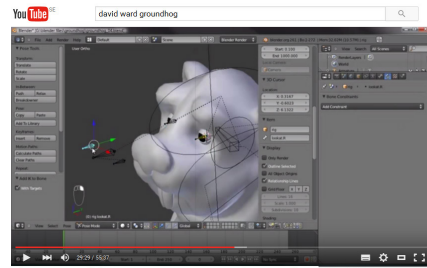


Blender 6 eyes p. 1

On youtube.com you can search for David Ward's Groundhog. In part 4 you can listen to how the eyes are rigged.

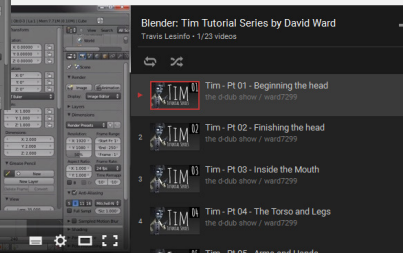
On youtube.com you can search for David Ward's Tim. In the last part of part 16 you can listen to how Tim's eyes are rigged.



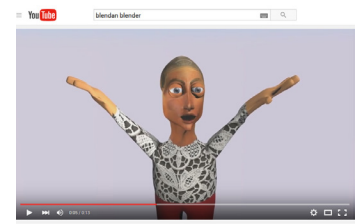
Character Modeling: Creating a Cartoon-Style Groundhog - Part 04



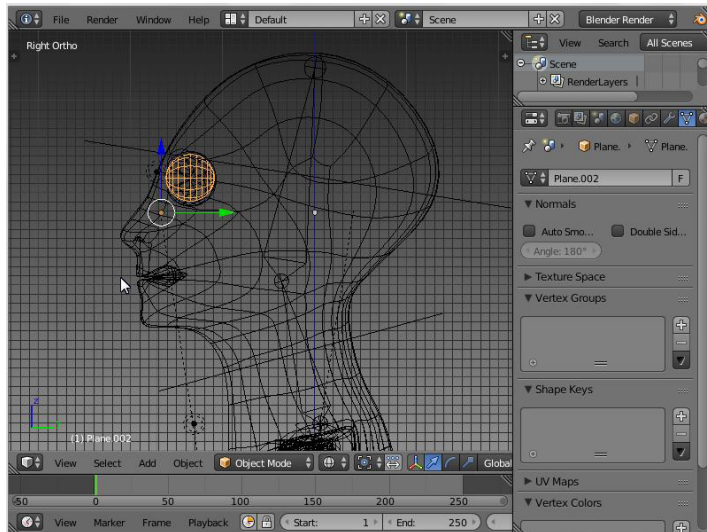
Tim - Pt 01 - Beginning the head



Blender you can find on <https://www.youtube.com/watch?v=6b5h7j0qexw>



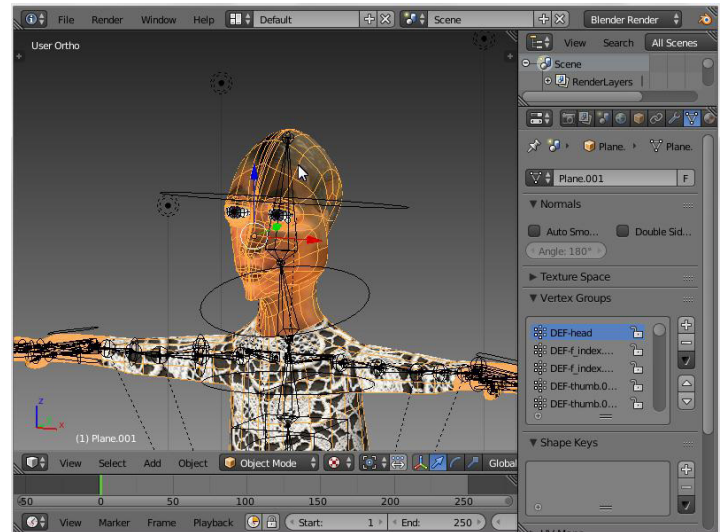
Blender beginner character to animate with Blender - see PDF-tutorials



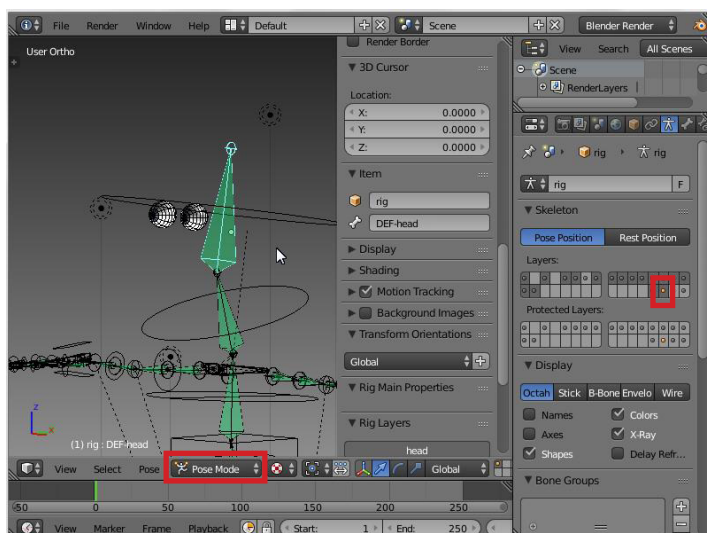
The eyes were created in this tutorial first part about how to create Blender's head. The eyes were placed in their own mesh outside the head. If you cannot find the eyes test with - Z - to go into wireframe to try to see the eyes - perhaps inside the head and then move them into place.

Perhaps you have hid the eyes with - H. To unhide everything ALT+H. Things can also be hid on a hid layer.

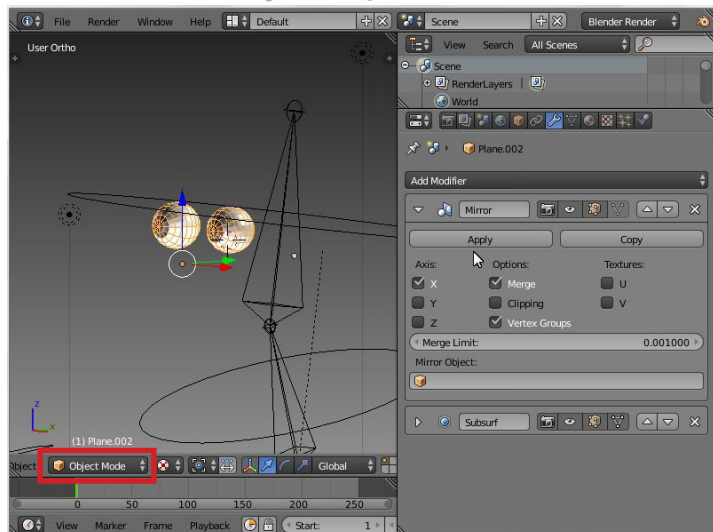
If so SHIFT click all the layers to see if something is hidden.



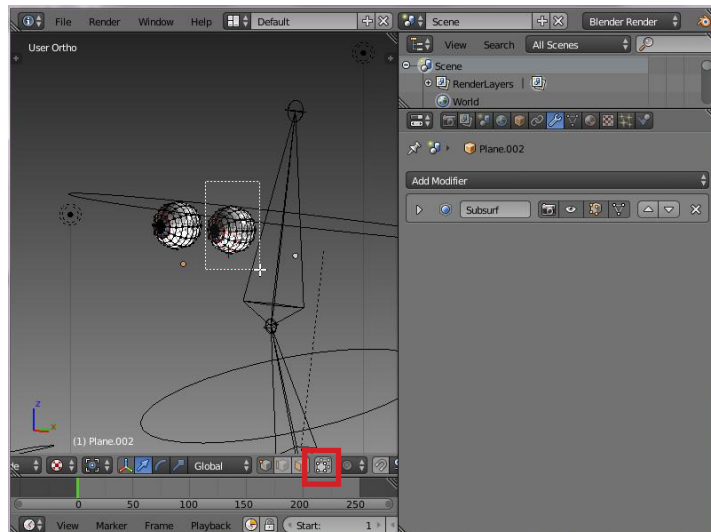
In Object Mode select the body and then H - to hide the body.



The DEFhead has to be un-hidden. If it is hidden mark the rig - go to Pose Mode and SHIFT click the layers with the DEF-bones.



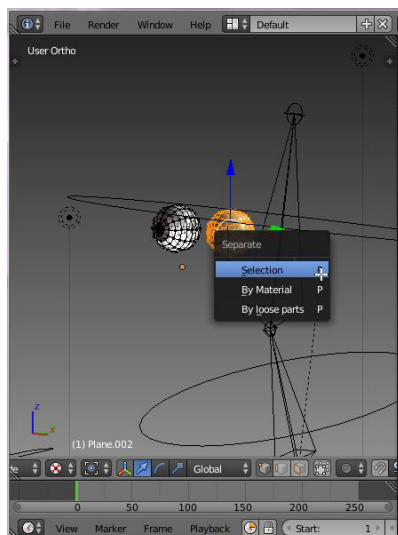
Select the eyes in Object Mode and then click the Apply button under the Mirror Modifier.



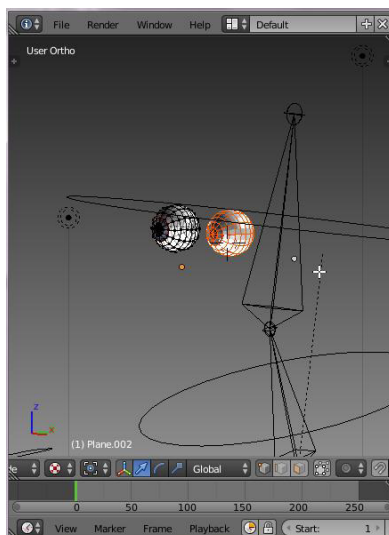
Tab - to go to Edit Mode.

Click the button so you can see the backside of the eyes.

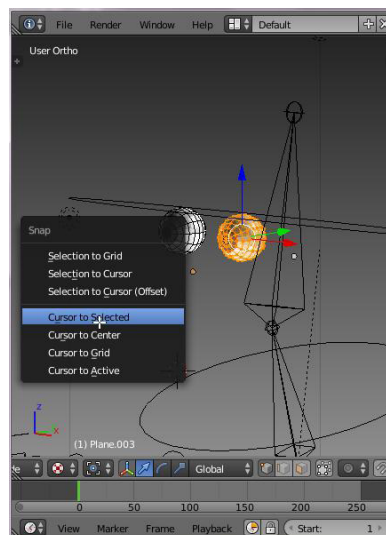
B - to have a rectangle and then mark one of the eyes.



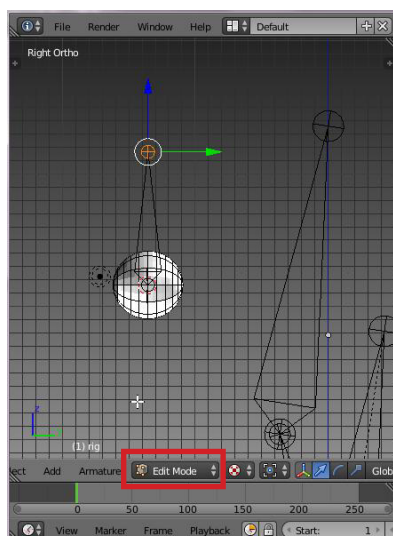
P - and choose Selection and the selected eye will become its own mesh separated from the other eye.



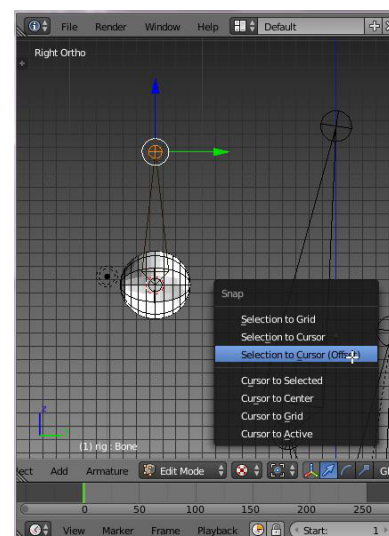
In Object Mode there are now two separate eyes.



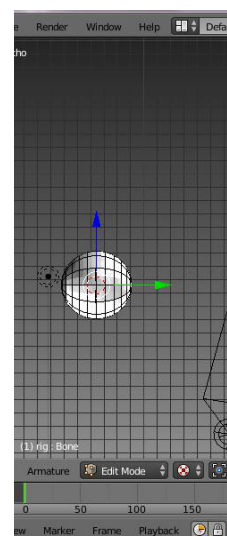
Select one of the eyes and then Tab - to go to Edit Mode and then SHIFT+S and choose Cursor to Selected



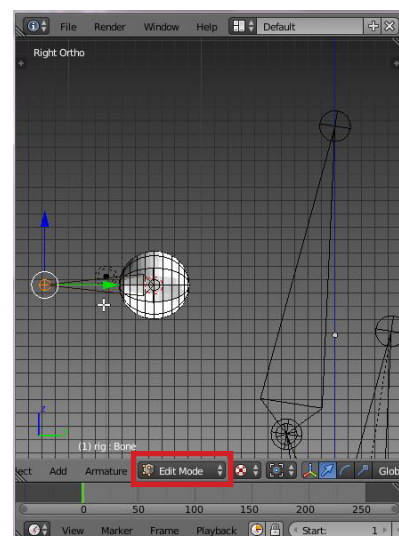
Select the rig and go to Edit Mode and then SHIFT+A and a bone is created where the 3D Cursor is placed - in the middle of the eye.



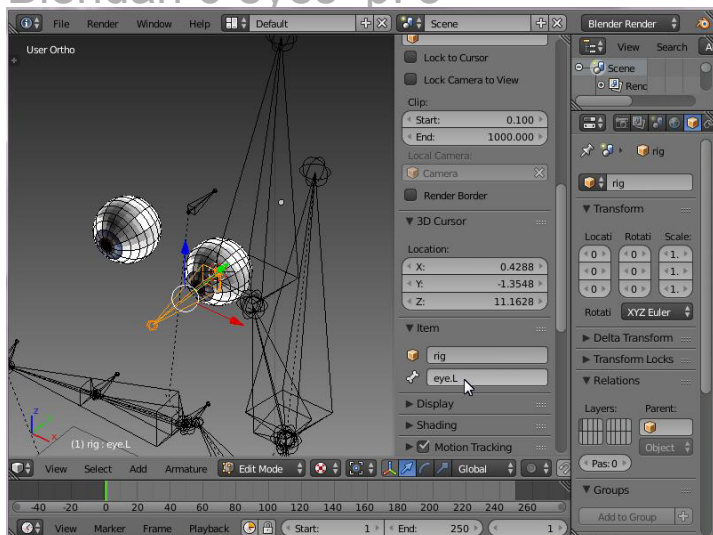
SHIFT+S and choose Selection to Cursor



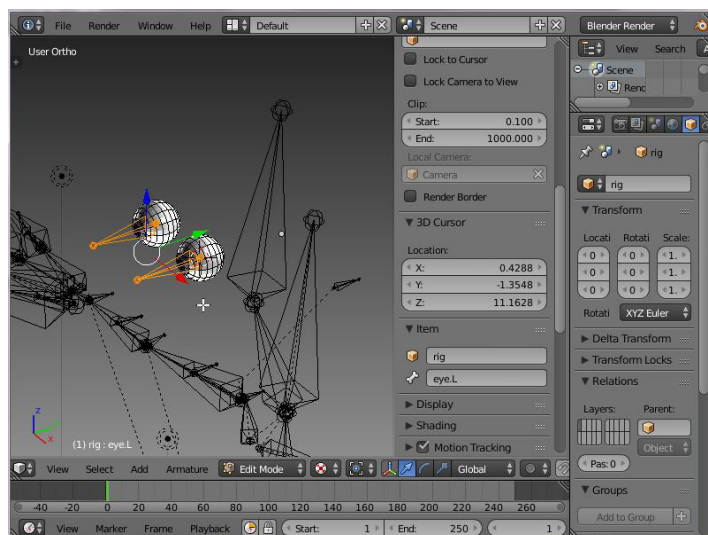
and the bone shrinks and is hiding inside the eye



Drag in the Y-axis and you will get sight of the bone - now pointing forwards.

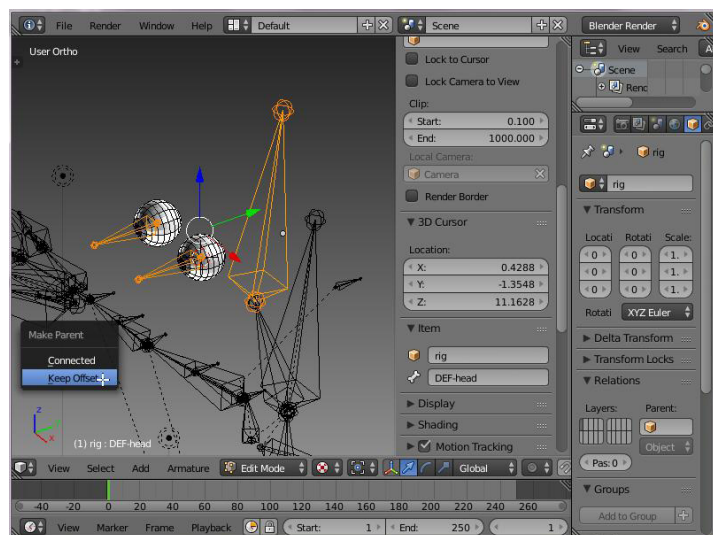


Select the left eyes bone and name it eye.L



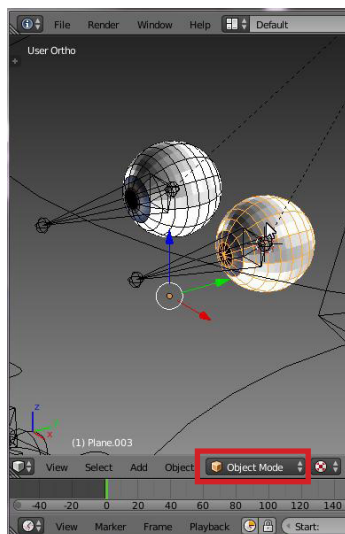
In Object Mode select the eye and then SHIFT+D and you will get a copy of the eye.

G+X and move the copy to the right eye's middle and name it to eye.R

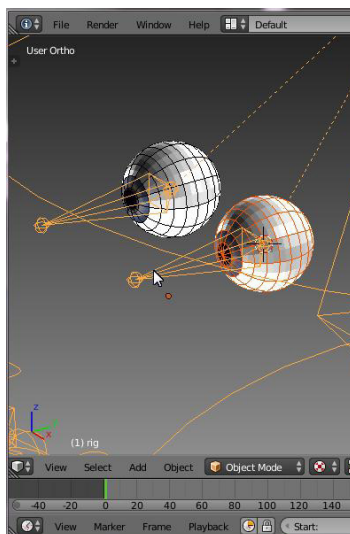


With SHIFT select the two eyes bones and then with SHIFT also mark the DEF-head bone.

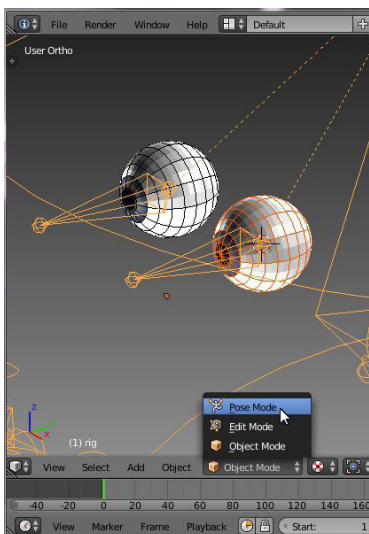
CTRL+P and choose Keep Offset



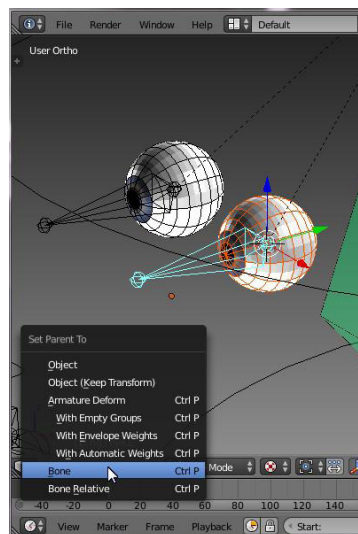
In Object Mode select one of the eyes.



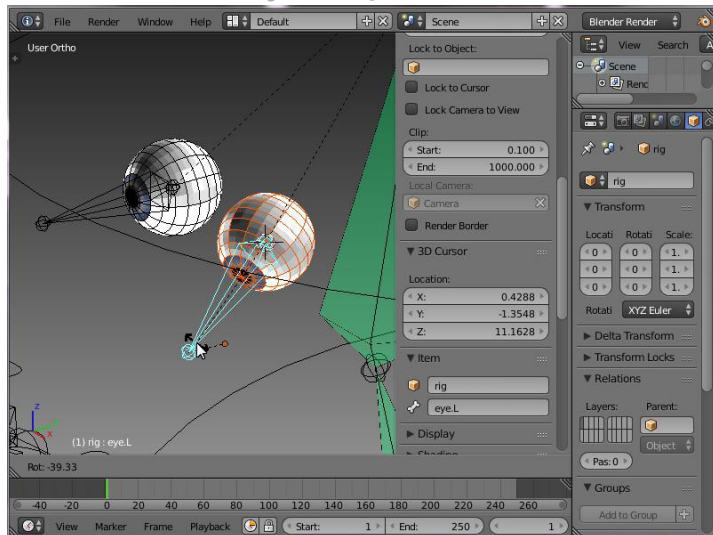
And then select with SHIFT the eyes bone.



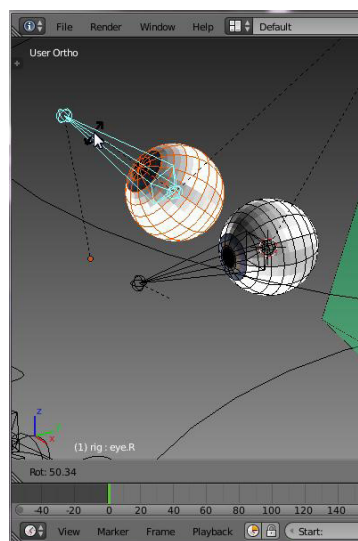
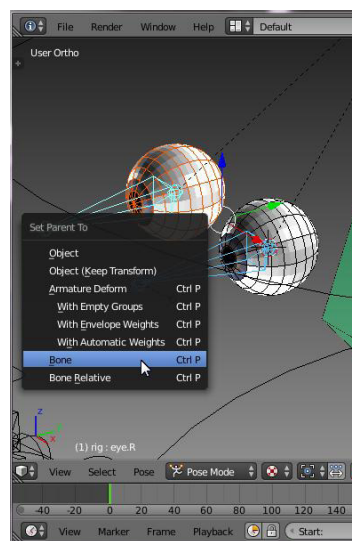
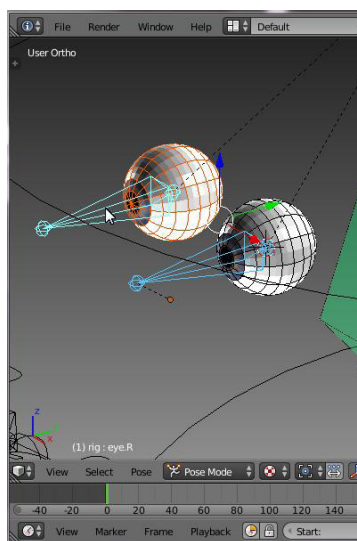
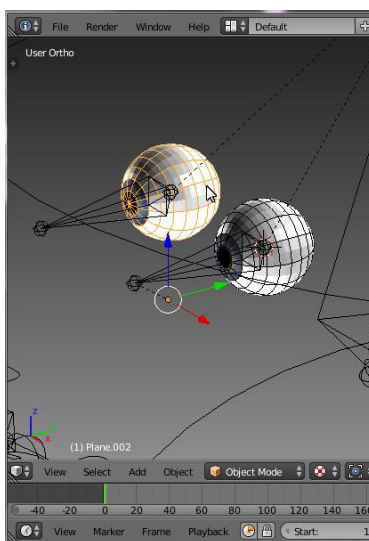
Go to Pose Mode



CTRL+P and choose Bone



In Pose Mode test with R - to rotate the eye-bone and the eye will follow the rotation. Esc - to abort the rotation.

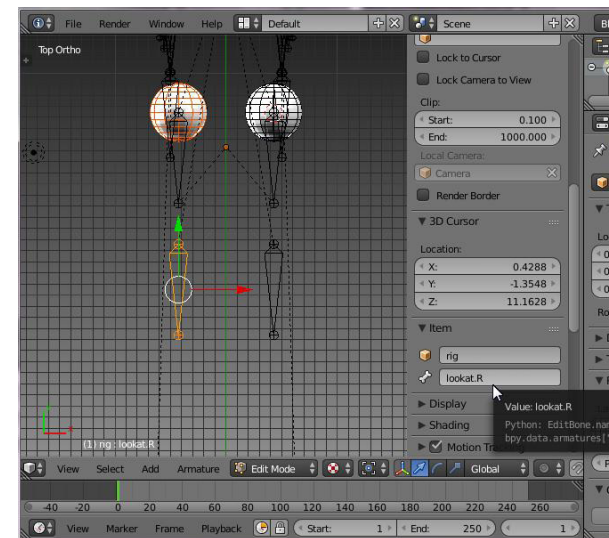
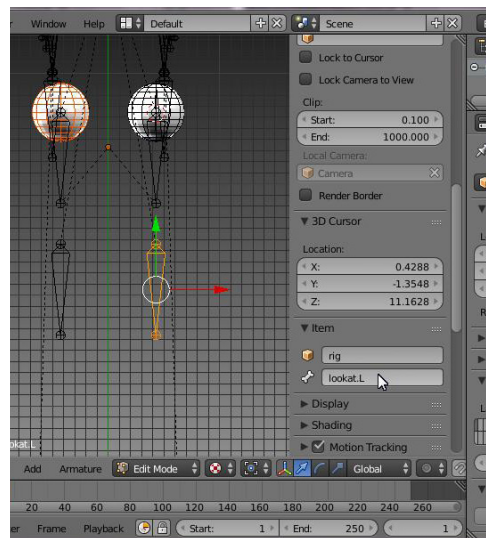
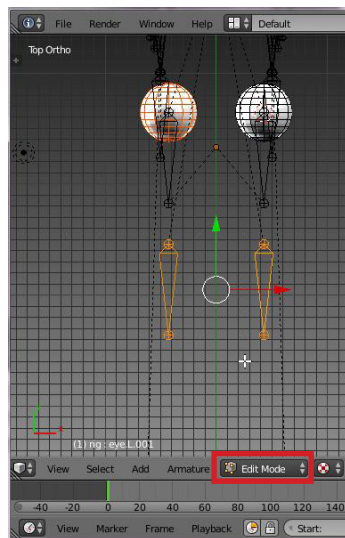


And now the same procedure with the other eye. In Object Mode select the eye.

And then with SHIFT select the eyes bone and choose Pose Mode.

CTRL+P and choose Bone

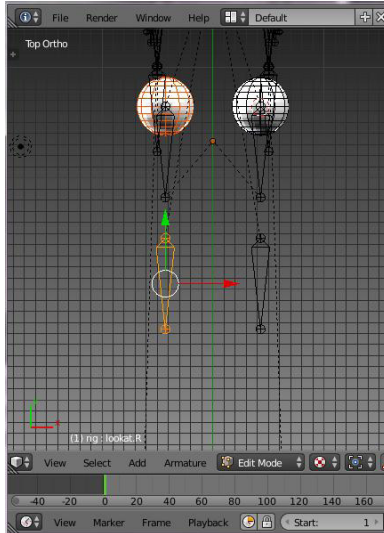
In Pose Mode test with - R - to rotate the bone and the eye will follow. Esc to abort the rotation.



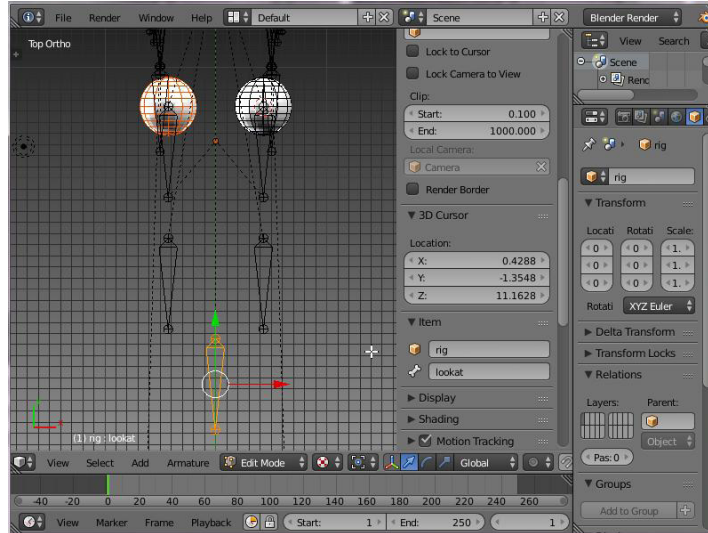
7 - go to the Top view.
Select the two bones of the eyes in Edit Mode.
SHIFT+D and two copies will be created
G+Y and move the copies forwards.

N - for the Properties menu
Select the new bone of the left eye and name it to lookat.L

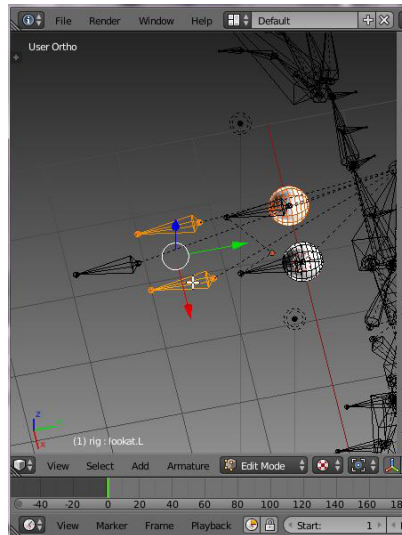
Select the new bone of the right eye and name it to lookat.R



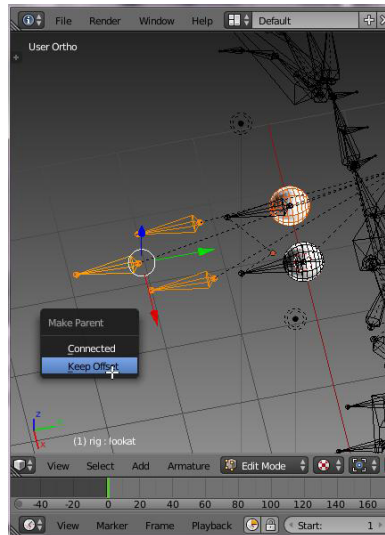
Select one of the lookat-bones and then SHIFT+D and a copy will be created



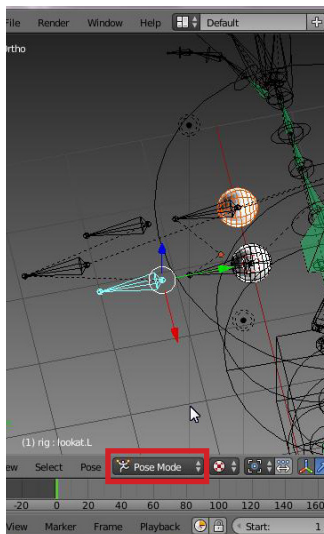
Move the bone so it will be placed between the two lookat-bones. And name it lookat



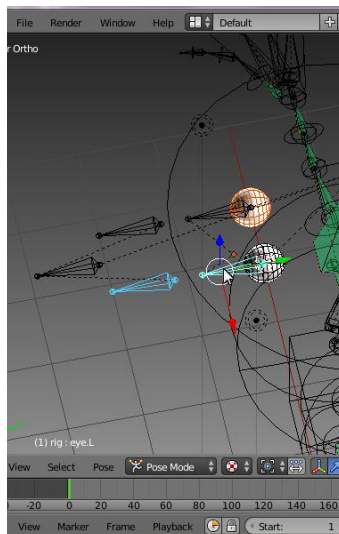
Hold down SHIFT to select the right and the left lookat bone.



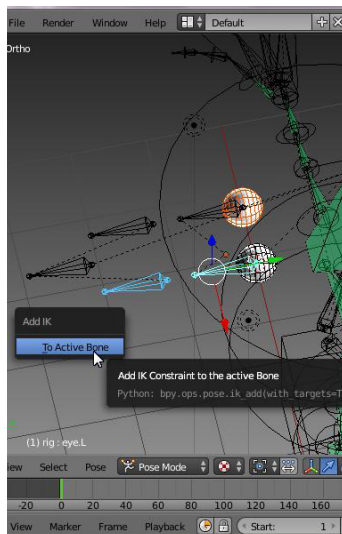
Hold down SHIFT to also select lookat bone in the middle and then CTRL+P and choose Keep Offset



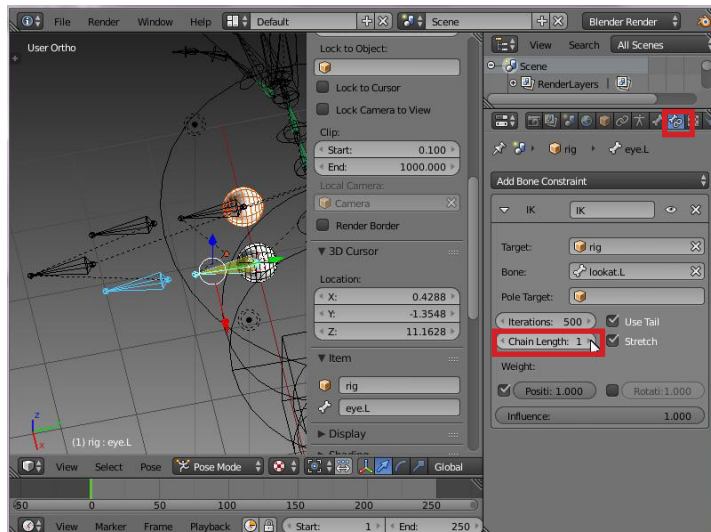
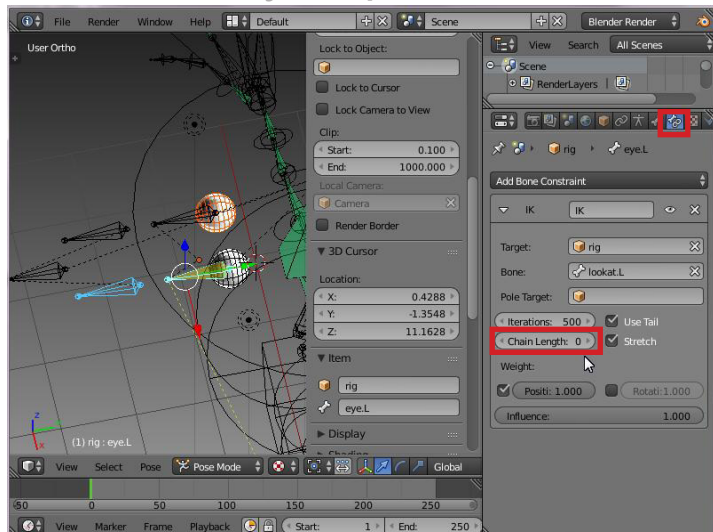
Go to Pose Mode. Select one of the lookat-bones



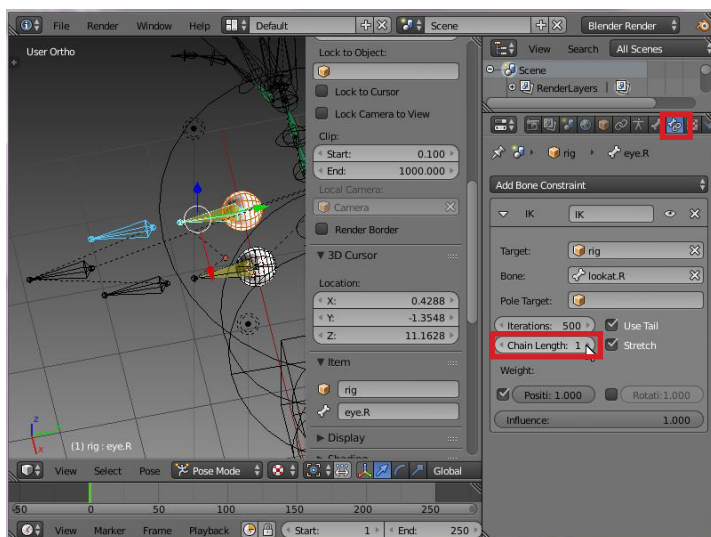
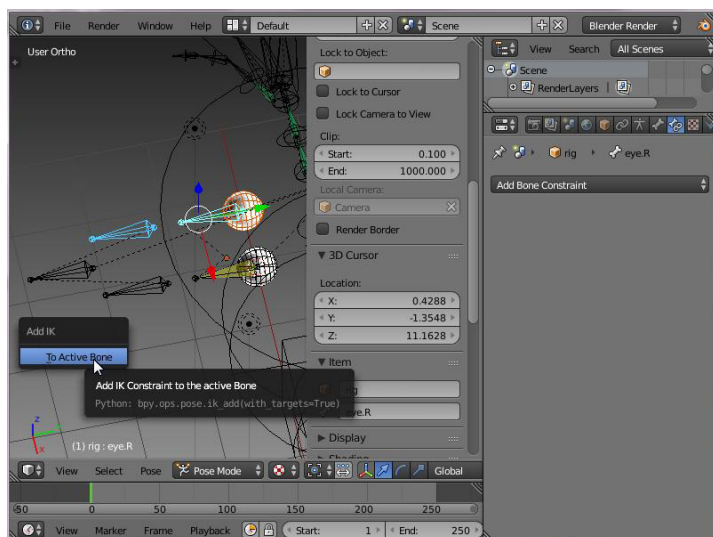
Hold down SHIFT and select the eye bone on the same side



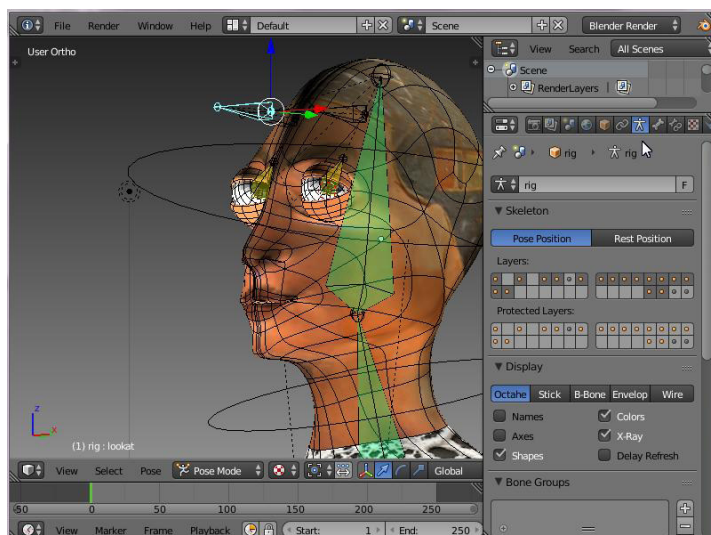
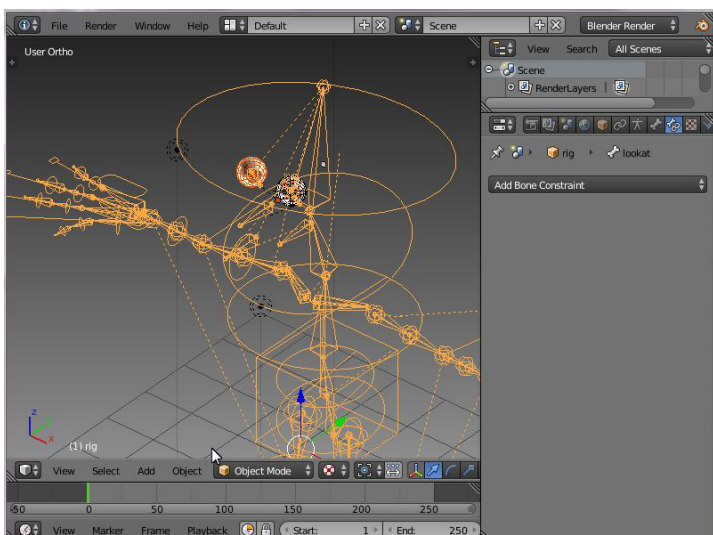
SHIFT+I and choose To Active Bone



On the tab Bone Constraint increase Chain Length from 0 to 1



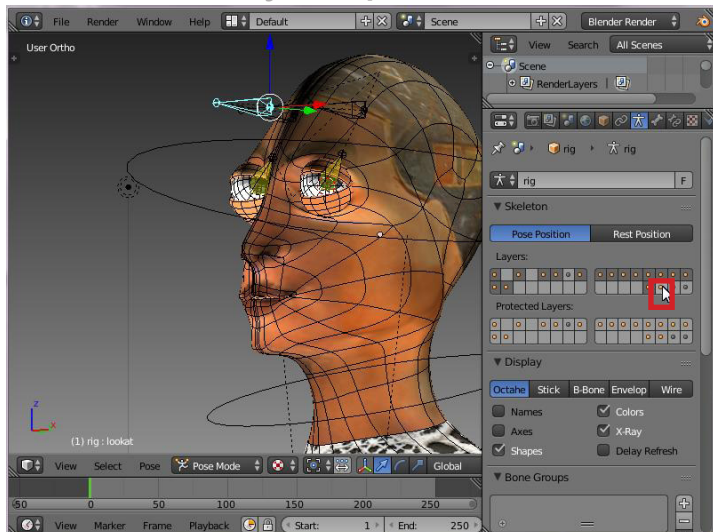
Repeat the procedure with the bones on the other side.



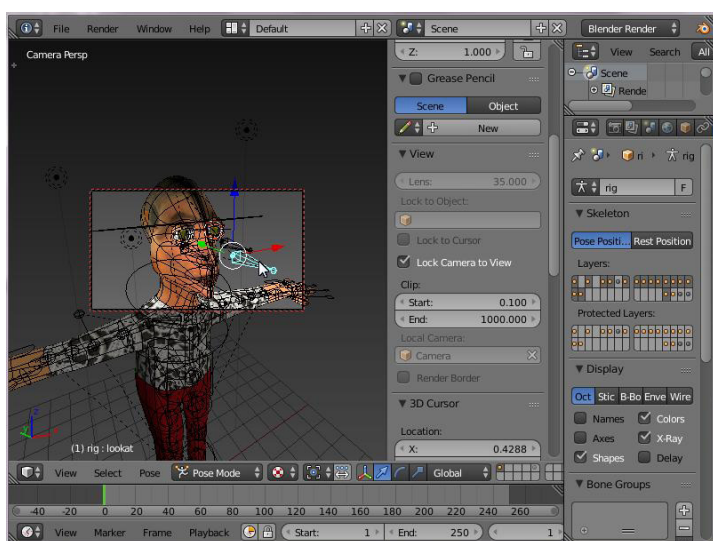
Go to Object Mode.

ALT+H will unhide the body

In Pose Mode test to move the lookat bone and the eyes will follow.



Hold down SHIFT and deselect the layer with the DEF-bones.



0 - to go to camera view

N - for the Properties menu and you can tick Lock Camera To View and you can zoom, pan and rotate the scene to get a good view of the head and move the lookat-bone.



F12 - to render and see the result

F3 - to save the image

Esc - to go back to the 3D view